

ADDENDUM NUMBER 2

GENERAL MITCHELL INTERNATIONAL AIRPORT  
CONCOURSE C CHECKPOINT LANE ADDITION  
Site #290, Bldg. #205  
5300 South Howell Avenue  
Milwaukee, WI

Project Number: A175-11009

Date of Addendum: October 17, 2011

This Addendum to the Contract Documents is issued to modify, explain or correct the original documents, dated September 9, 2011, and is hereby made part of the Contract Documents. Acknowledge receipt of this Addendum in the space provided on the Bid Form, or bid may be rejected.

BIDDING AND CONTRACT DOCUMENTS

Document 00100 - INVITATION TO BID

CHANGE Bid Due Date to November 2, 2011 at 2:00 P.M.

DELETE Contract - 1 General Construction

Work of Contract 1 was awarded and work is now in progress. Contract Bidding will only include Contract- 2 Mechanical Work.

Documents 00250 - PRE-BID MEETING

CHANGE Pre-Bid meeting date to October 25, 2011 at 11:30 A.M. The meeting location will remain in the Hardie Conference room.

Document 00400 - BID FORM

DELETE Contract - 1 General Construction.

CHANGE Completion of Contract Work as follows:

Contract- 2 Mechanical shall be substantially complete by February 24, 2012.

Document 00800 - SUPPLEMENTARY CONDITIONS

CHANGE Article 8.2.3.2 as follows:

Substantial Completion date for Contract 2 shall be changed to February 24, 2012.

ADD the following to Article 11.1.4:

A waiver of subrogation for Workers Compensation in favor of Milwaukee County will be provided by endorsement by the Contractor's insurer.

REVISE the first sentence of the Add to Clause 11.4.1.3 with the following:

Owner will furnish Property Insurance during construction written with a deductible of \$5,000 per occurrence. Property Insurance for construction shall be provided at the completed project value.

The \$5,000 deductible as well as any other costs not covered by the builders risk policy are the responsibility of the Contractor.

Section 01100 - SUMMARY

CHANGE Article 1.2 CONTRACT DESCRIPTION, as follows:

Work of Contract 1 was awarded and work is now in progress. Contract Bidding will only include Contract 2 Mechanical Work.

Contract 1 Work also includes the HVAC "Division 23" work INSIDE of the building west of column line "J".

Contract 2 Work includes mechanical work for the project east of column line "J" and ALL HVAC Work OUTSIDE of the building including final connections to ductwork provided by Contract 1 work.

CHANGE Article 1.7, WORK SEQUENCE, A. as follows:

A. Construct Work in phases to accommodate Owner's occupancy requirements during construction period, coordinate construction schedule and operations with Owner.

1. Phase 1: Construction Sequence A.

a. Phase 1 includes Project start-up, procurement and preparation of submittals /field investigations.

- b. Phase 1 work includes ALL interior construction work.
  - c. Phase 1 work includes ALL exterior construction work related to preparing the roof and roof structure for the new rooftop air handling unit and ductwork.
  - d. Phase 1 work includes the HVAC Work INSIDE of the building west of column line "J".
  - e. On-site work will be restricted to "after hours" (7:30 P.M. to 3:30 A.M., which may be affected by late arriving / departing flights).
2. Phase 2: Construction Sequence B.
- a. Phase 2 Sequence B work includes delivery and installation of the CURBS AND SUPPORT RAILS for new rooftop air handling unit and rooftop ductwork.
  - b. On-site work will be restricted to "after hours" (7:30 P.M. to 3:30 A.M., which may be affected by late arriving / departing flights).
3. Phase 2: Construction Sequence C.
- a. Phase 2 Sequence C work consists of Mechanical Work for the Project east of column line "J" and ALL HVAC Work OUTSIDE of the building, including installation of the new rooftop air handling unit and rooftop ductwork including final connections to ductwork provided by Contract 1, final connections and system start up.
  - b. On-site work affecting operations of the security checkpoint will be restricted to "after hours" (7:30 P.M. to 3:30 A.M., which may be affected by late arriving / departing flights).
  - c. On-site work NOT affecting operations of the security checkpoint may be conducted during "normal hours" (4:00 A.M. to 8:00 P.M.).
  - d. On-site work is not permitted before January 9, 2012. Once onsite operations are begun, the work must be continuous and uninterrupted to the point of substantial completion, and must be substantially complete within three weeks.

CHANGE Article 1.9, MILESTONES, A. as follows:

A. Construct Work in Phases to be substantially complete within the following milestone dates:

1. Phase 1	Construction Sequence A	November 11, 2011
2. Phase 2	Construction Sequence B	November 22, 2011
3. Phase 2	Construction Sequence C	February 24, 2012

Section 01500 - TEMPORARY FACILITIES AND CONTROLS

CHANGE Article 1.7, COLD WEATHER PROTECTION, as follows:

- A. Heating and covering required to protect the Work from injury due to freezing and precipitation during construction period shall be classified as "Cold Weather Protection.
- B. Each Prime Contractor requiring heat and protection shall provide their own heat and protection in accordance with stated requirements.
- C. Electrical power may not be used as a source of heat for heating units unless paid for by Contractor from an acceptable power source installed by Contractor requiring power.
- D. Portable Units: Do not use temporary units that may damage materials. Stoves, salamanders, tar pots, etc., are prohibited. Temporary heating devices shall be substantially constructed, in good operating condition, not readily overturned, and restricted to electricity, oil or gas as fuel. Provide means of venting units as required.
- E. Heating shall be as required to maintain temperatures as specified in various Sections of the Specifications where work is being conducted, or as regularly required for particular work, but not less than 40 degrees F. Contractor requiring heat shall pay cost of energy used.

Document 230914 - PNEUMATIC AND ELECTRIC INSTRUMENTATION AND CONTROL DEVICES FOR HVAC

ADD THE FOLLOWING TO: PART 1 – GENERAL 1.01 SCOPE, A, PART 2 - Products

- 2.13 Carbon Dioxide Sensor
- 2.14 Duct Smoke Detector and Fire Alarm Interface Modules

ADD THE FOLLOWING TO: PART 2 – PRODUCTS

- 2.13 CARBON DIOXIDE SENSOR
  - A. Provide a Carbon Dioxide (CO<sub>2</sub>) sensor that shall utilize non-dispersive infrared (NDIR) technology. The sensor shall have a linear analog output over a range of 0-2000 ppm and have built in display of CO<sub>2</sub> level. The sensor shall have an automatic calibration algorithm that will compensate for sensor drift over time due to sensor element degradation. Unit shall be provided with a 0-10VDC or 4-20mA analog output that is selectable and a field adjustable relay alarm output. Accuracy shall be better than 5% of reading or  $\pm$ 50ppm whichever is higher. The sensor shall be user calibratable with a minimum calibration interval of five years.
- 2.14 DUCT SMOKE DETECTOR AND FIRE ALARM INTERFACE MODULES
  - A. Detectors with auxiliary contacts or fire alarm control modules will be provided by others. Provide wiring, conduit, and necessary interface with fire alarm system to perform specified sequence of operation.

Documents 230993 – SEQUENCE OF OPERATION FOR HVAC CONTROLS

ADD THE FOLLOWING TO: PART 1 – GENERAL 1.01 SCOPE, A, PART 3 - Execution

- 3.03 Temperature Control Panel:
- 3.04 Smoke Detector Operation:

ADD THE FOLLOWING TO: PART 3 – EXECUTION

- 3.03 TEMPERATURE CONTROL PANEL:
  - A. All hydronic sensors, CO<sub>2</sub>, smoke sensor, pressure gauges and temperatures shall be monitored and sent to the TCP. The thermostat shall control the space temperature at Checkpoint C. All facility functions shall go to the TCP.
- 3.04 SMOKE DETECTOR OPERATION:
  - A. The smoke detector shall be interlocked to the TCP and upon sensing smoke in the return air shut down the supply and return fans on RTU-1C.

DRAWINGS

Sheet A1.01 – DEMOLITION PLAN

REPLACE Drawing A1.01 with attached Drawing.

Sheet A1.03 – REFLECTED CEILING PLAN

REPLACE Drawing A1.03 with attached Drawing.

Sheet A1.04 – ROOF PLAN

REPLACE Drawing A1.04 with attached Drawing.

Sheet A1.05 – ROOF FRAMING PLAN

REPLACE Drawing A1.05 with attached Drawing.

Sheet A4.04 – SECTIONS & DETAILS

REPLACE Drawing A4.04 with attached Drawing.

Sheet M1.00 – CONCOURSE LEVEL DEMO FLOOR PLAN - HVAC

REPLACE Drawing M1.00 with attached Drawing.

Sheet M1.01 – APRON LEVEL NEW FLOOR PLAN - HVAC

REPLACE Drawing M1.01 with attached Drawing.

Sheet M1.02 – CONCOURSE LEVEL NEW FLOOR PLAN - HVAC

REPLACE Drawing M1.02 with attached Drawing.

Sheet M1.03 – ROOF LEVEL PLAN - HVAC

REPLACE Drawing M1.03 with attached Drawing.

Sheet M2.00 – SCHEDULES - HVAC

REPLACE Drawing M2.00 with attached Drawing.

Sheet M3.00 – DETAILS

ADD "LINED" to all references of "DUCT" or "DUCTWORK" on Detail 1 and Detail 3.

Sheet M3.01 – DETAILS AND SECTIONS - HVAC

REPLACE Drawing M3.01 with attached Drawing.

Sheet E6.01 – SCHEDULES AND DETAILS

CHANGE Motor Wiring Schedule, as follows:

A. Motor Wiring Schedule: Change the horse power of motor #1 to 7.5 at 480V, 3-phase.

B. Motor Wiring Schedule: Change the horse power of motor #2 to 7.5 at 480V, 3-phase.

CHANGE Panelboard Schedule, as follows:

A. Panelboard Schedule "1/PP1": Change new 15A, 3-pole circuit breaker in breaker space #3 to a 20A, 3-pole circuit breaker. Change referenced sheet note to #1.

CHANGE Detail 1/E6.01, as follows:

A. Detail "1/E6.01" – Partial One Line Diagram: Change circuit breaker size serving motor #2 to a 20A, 3-pole circuit breaker in lieu of the 15A, 3-pole shown. Change the referenced sheet note to #1.

CHANGE Sheet Notes, as follows:

A. Sheet Notes: Change sheet note #2 to read "NOT USED".

End of Addendum No. 2